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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/670,642	09/25/2003	Greg Opheim	30203/38289	6807

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EXAMINER	
VERDI, KIMBLEANN C	

ART UNIT	PAPER NUMBER
2194	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/670,642	OPHEIM, GREG	
	Examiner	Art Unit	
	KimbleAnn Verdi	2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 January 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *August 20, 2007 and September 25, 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This office action is in response to the Amendment filed on January 8, 2008. Claims 1-20 are pending in the current application. All previously outstanding objections and rejections to the Applicant's disclosure and claims not contained in this Action have been respectfully withdrawn by the Examiner hereto.

Response to Arguments

1. Applicant's arguments, see pages 8 and 9, filed January 8, 2008, with respect to claims 1-8, 14-18, and 19-20 rejected under *35 USC § 112* have been fully considered and are persuasive. The *35 USC § 112* rejection of claims 1-8, 14-18, and 19-20 has been withdrawn.

2. Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 101

3. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 19 and 20 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

With respect to claims 19 and 20, a "computer system" is being recited; however, it appears that a computer system would reasonably be interpreted by one of ordinary skill in the art as software, per se.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 14, 15, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent Application Publication 2002/0083228 A1 to Chiloyan et al. (hereinafter Chiloyan).

7. As to claim 14, Chiloyan teaches a computer system for updating a process control (e.g. industrial control) host application with a device description of a process control (e.g. industrial control) device (paragraphs [0028] and [0008], the computer system being connected to a device description database via a communication network (paragraph [0016]), the computer system comprising:

a processing unit (21, Fig. 1);

a computer readable memory (RAM 25, Fig. 1); and

a software routine stored on the computer readable memory and executable on the processing unit to (paragraph [0017]):

receive a device description identification from a device (paragraph [0037]),

download the device description of the process control (e.g. industrial control) device from the device description database using the device description identification (paragraphs [0039]-[0041]), and

update the host application with the device description (paragraph [0042]).

8. As to claim 15, Chiloyan teaches the computer system of claim 14, wherein the software routine is further executable on the processing unit to download the device description using one of an Internet protocol and a wireless communication protocol (paragraphs [0039]-[0041]).

9. As to claim 18, Chiloyan teaches the computer system of claim 14, wherein the software routine is further executable to update a remote host application located on a remote computer communicatively connected to the computer system (paragraphs [0028]-[0031]).

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 1-6, 8, 9-13, 15, and 19-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent 5,960, 214 to Sharpe, Jr. et al. (hereinafter Sharpe) in view of United States Patent Application Publication 2002/0083228 A1 to Chiloyan et al. (hereinafter Chiloyan).

12. As to claim 1, Sharpe teaches the invention substantially as claimed including a method of updating a host application running on a host system (col. 4 lines 47-49), in a process plant, wherein the host system is connected to a plurality of process control devices used in the process plant (management system used for manufacturing or

refinery process, col. 6, lines 1-5, conventional and smart devices 16, 18, 22, 20, and 24, Fig. 1, col. 6, lines 5-7).

Sharpe does not explicitly disclose

sending a first command from the host system to a device to request a device description identification;

receiving the device description identification at the host system;

downloading a device description associated with the device description identification into the host system using the device description identification; and

updating the host application to include the device description.

However Chiloyan teaches sending a first command from the host system to a device to request a device description identification (paragraph [0036]);

receiving the device description identification at the host system (paragraph [0037]);

downloading a device description associated with the device description identification into the host system using the device description identification (paragraphs [0039]-[0041]); and

updating the host application to include the device description (paragraph [0042]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the device description of Sharpe with the teachings of device descriptor from Chiloyan because this feature would have provided a mechanism for the host device to download a device driver for the peripheral device

from a remote device (paragraph [0008] of Chiloyan), which may be practiced in an industrial control equipment computer system configuration (paragraph [0028] of Chiloyan).

13. As to claim 2, Sharpe as modified teaches wherein downloading the device description includes downloading the device description from one of a CD-ROM, a diskette, and an online database (paragraphs [0040]-[0041] of Chiloyan).

14. As to claim 3, Sharpe as modified teaches the method of claim 1, wherein updating the host application includes copying the device description into the host application (paragraphs [0041]-[0042] of Chiloyan).

15. As to claim 4, Sharpe teaches the method of claim 1, wherein the device is one of a plurality of process control devices used in the process plant (conventional and smart devices 16, 18, 22, 20, and 24, Fig. 1, col. 6, lines 5-7).

16. As to claim 5, Sharpe as modified teaches the method of claim 1, further including searching for the device description on the host system based on the device description identification (paragraph [0037] of Chiloyan).

17. As to claim 6, Sharpe as modified teaches the method of claim 1, wherein downloading the device description includes:

connecting the host system to a communication network (paragraph [0041] of Chiloyan);

requesting the device description from a device description database connected to the communication network (paragraphs [0041] of Chiloyan); and

receiving the device description from the device description database (paragraphs [0041] and [0042] of Chiloyan).

18. As to claim 8, Sharpe as modified teaches the method of claim 6, wherein downloading the device description includes storing an Internet address of the device description database (paragraphs [003]-[0041] of Chiloyan) and using one of an Internet communication protocol and a wireless communication protocol to connect to the device description database (paragraphs [003]-[0041] of Chiloyan).

19. As to claim 9, this claim is rejected for the same reasons as claim 1 since claim 9 recites the same or equivalent invention, see the rejection to claim 1 above.

20. As to claim 10, this claim is rejected for the same reasons as claim 3 since claim 10 recites the same or equivalent invention, see the rejection to claim 3 above.

21. As to claim 11, this claim is rejected for the same reasons as claim 6 since claim 11 recites the same or equivalent invention, see the rejection to claim 6 above.

22. As to claim 12, this claim is rejected for the same reasons as claim 8 since claim 12 recites the same or equivalent invention, see the rejection to claim 8 above.

23. As to claim 13, Sharpe teaches wherein the host application is one of (1) an asset management system application (Field Management Solutions system 10 (FSM), Fig. 1 which integrates device management, col. 6, lines 10-13, within a manufacturing or refinery process, col. 6, lines 3-5), and (5) a process control application (FSM in interconnected with a distributed control system 14, Fig. 1, col. 5, lines 66-67 and col. 6, lines 1-5, which controls the manufacturing or refinery process, col. 6, lines 3-5).

24. As to claim 15, this claim is rejected for the same reasons as claim 8 since claim 15 recites the same or equivalent invention, see the rejection to claim 8 above.

25. As to claim 19, Sharpe teaches the invention substantially as claimed including a computer system for use in a process plan having a plurality of process control devices (management system used for manufacturing or refinery process, col. 6, lines 1-5, conventional and smart devices 16, 18, 22, 20, and 24, Fig. 1, col. 6, lines 5-7) and one or more process applications requiring communication with the plurality of process control devices (col. 6, lines 1-16).

Sharpe does not explicitly disclose a communication module operable to request a device description identification from one of the plurality of devices;

a storage module operable to store the device description identification;

a search module operable to search for a device description database storing the device description identified by the device description identification;

a downloading module operable to download a device description from the device description database; and

an updating module operable to update one of the one or more process applications with the device description.

However Chiloyan teaches a communication module operable to request a device description identification from one of the plurality of devices (paragraphs [0028] and [0036]);

a storage module operable to store the device description identification (paragraphs [0028] and [0037]-[0039]);

a search module operable to search for a device description database storing the device description identified by the device description identification (paragraphs [0028] and [0041]);

a downloading module operable to download a device description from the device description database (paragraphs [0028] and [0039]-[0041]); and

an updating module operable to update one of the one or more process applications with the device description (paragraphs [0028] and [0042]).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the device description of Sharpe with the teachings of device descriptor from Chiloyan because this feature would have provided a mechanism for the host device to download a device driver for the peripheral device from a remote device (paragraph [0008] of Chiloyan), which may be practiced in an industrial control equipment computer system configuration (paragraph [0028] of Chiloyan).

26. As to claim 20, this claim is rejected for the same reasons as claim 8 since claim 20 recites the same or equivalent invention, see the rejection to claim 8 above.

27. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent Application Publication 2002/0083228 A1 to Chiloyan et al. (hereinafter Chiloyan) in view of United States Patent 6,446,202 B1 to Krivoshein et al. (hereinafter Krivoshein).

28. As to claim 7, Perlman does not explicitly disclose wherein the device description database is one of a Fieldbus database, a Profibus database and a HART communication foundation database.

However Krivoshein teaches wherein the device description database is one of a Fieldbus database (Fieldbus 84 Fig. 2), a Profibus database (Profibus 80, Fig. 2) and a HART communication foundation database (Hart 86, Fig. 2, these template databases store information needed to configure devices of the different device networks, col. 13, lines 66-67 and col. 14, line 1).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the database of Chiloyan with the teachings of device driver database from Krivoshein because this feature would have provided a mechanism for enabling the control system to communicate with and control different types of field devices (peripheral devices) using different communication protocols (e.g. Fieldbus, Profibus, and HART) (col. 5, lines 46-47 of Krivoshein).

29. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent Application Publication 2002/0083228 A1 to Chiloyan et al. (hereinafter Chiloyan) in view of United States Patent 6,694,354 B1 to Elg.

30. As to claim 16, Chiloyan does not explicitly disclose wherein the software routine is further executable on the processing unit to identify a device description language source of the host application, interpret the device description into the device description language source and insert the device description into the host application.

However Elg teaches wherein the software routine is further executable on the processing unit (e.g. Execution Unit 79, Fig. 7) to identify a device description language (e.g. protocol or OS type and version of Elg) source of the host application (host computer inserts platform/operating system identifier into URL, Fig. 3, col. 3, lines 39-44 of Elg), interpret the device description (device driver of Elg) into the device description language source (platform/operating system identifier of URL, Fig. 3 points to correct drivers which operate with platform/operating system of host computer, col. 3, lines 50-55 of Elg) and insert the device description (device driver of Elg) into the host application (device driver 16, Fig. 1, sent from WEB/FTP site 17, Fig. 1 to Host 11, Fig. 1. of Elg).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the network connection of Chiloyan with the teachings of a communication medium from Elg because this feature would have provided a mechanism for locating retrieving device drivers associated with mobile peripheral devices (col. 1, lines 51-54 of Elg).

31. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over United States Patent Application Publication 2002/0083228 A1 to Chiloyan et al. (hereinafter Chiloyan) in view of United States Patent 5,960, 214 to Sharpe, Jr. et al. (hereinafter Sharpe).

32. As to claim 17, Chiloyan does not explicitly disclose wherein the host application is one of (1) an asset management system application, (2) a plant simulation

application, (3) a plant maintenance application, (4) a plant monitoring application, and (5) a process control application.

However Sharpe teaches wherein the host application is one of (1) an asset management system application (Field Management Solutions system 10 (FSM), Fig. 1 which integrates device management, col. 6, lines 10-13, within a manufacturing or refinery process, col. 6, lines 3-5), and (5) a process control application (FSM in interconnected with a distributed control system 14, Fig. 1, col. 5, lines 66-67 and col. 6, lines 1-5, which controls the manufacturing or refinery process, col. 6, lines 3-5).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to have modified the industrial control equipment of Chiloyan with the teachings of Field Management Solutions system from Sharpe because this feature would have provided a mechanism to view multiple devices in a simultaneous or sequential manner, to perform common control and configuration functions without switching applications or interfaces to run non-device specific applications (col. 5, lines 39-43 of Sharpe).

Conclusion

33. The prior art made of record on the accompanying PTO-892 and not relied upon, is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KimbleAnn Verdi whose telephone number is (571) 270-1654. The examiner can normally be reached on Monday-Friday 7:30am-5:00pm EST..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571) 272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KV
January 25, 2008

WILLIAM THOMSON
SUPERVISORY PATENT EXAMINER